

Zarlink and BroadLight Combined Packet Processing and GPON Technologies Support Rollout of Fiber Access Networks

- CESoP and GPON technologies allow carriers to migrate towards fiber-based architecture that supports “triple play” and carrier-grade TDM services

OTTAWA, CANADA, August 9, 2006 – Zarlink Semiconductor (NYSE/TSX:ZL) today announced that it has completed interoperability testing of its CESoP (circuit emulation services-over-packet) technology with BroadLight, a leading vendor of PON (passive optical network) solutions. Using the companies combined technologies, service providers can deploy GPON (gigabit PON) fiber access networks that support “triple play” voice, video and data applications and T1/E1 voice, leased line and frame relay services.

As service providers migrate towards a unified network, GPON has emerged as the lower-cost, higher-bandwidth architecture of choice to deliver premium communication and entertainment applications, including HDTV (high-definition TV), IPTV (Internet Protocol TV), VoIP (voice-over-IP) and more. However, existing TDM voice and data traffic – which continue to represent a significant portion of carrier revenues – must still be cost-effectively transported over the new packet infrastructure. The continued importance of TDM traffic is seen in the recent GPON RFP (request for proposal) issued in North America, which stipulates legacy services must be supported.

“Carriers are seeking ways to add TDM service support to the new GPON infrastructure, rather than incur the expense of maintaining existing circuit networks,” said Bruce Ernhofer, product manager, Packet Processing, Zarlink Semiconductor. “CESoP is a key bridging technology that allows carriers to seamlessly support TDM services over a packet network, without endangering existing revenues or requiring an equipment upgrade on the part of their customers.”

The tested solution, based on Zarlink’s CESoP technology and BroadLight’s BL3238 OLT (optical line terminal) MAC (media access controller), supports the delivery of TDM-based services across central office and customer premises GPON equipment.

Using CESoP technology in the OLT, circuit-switched traffic along with associated timing and signaling information is converted into IP or Ethernet packets and tunneled across the GPON network. At the OLT, GPON access blades supporting TDM services do not need to include TDM circuitry and backplane connectivity.

At the business CPE (customer premise equipment), Zarlink's CESoP technology and BroadLight's BL2340 ONU (optical network unit) System on Chip are a highly integrated standards-based solution enabling carriers to quickly deploy high-margin, revenue-generating channelized, fractional and clear channel T1/E1 services.

Testing proved BroadLight's GPON solution and Zarlink's CESoP products meet performance demands for equipment delivering both "triple play" and TDM services over fiber-based networks. Testing demonstrated the performance of T1 and E1 trunks carried over GPON, as well as clock recovery accuracy and latency and PDV (packet delay variation) measurements in the test network. Clock recovery performance was better than 15 ppb (parts per billion).

Flexible, standards-based TDM-over-packet solution

Zarlink's CESoP technology provides GPON equipment manufacturers with the flexibility to use adaptive or differential synchronization. In adaptive mode, the original timing information is recovered from the transmitted CESoP stream. Using differential mode ensures optimal clock recovery by using the very accurate 8 kHz clock source provided over the GPON, overcoming any synchronization issues in the case of significant packet delay.

Most carriers have specified that TDM-over-packet and pseudo wire solutions for GPON deployment must conform to the IETF draft standards and MEF (Metro Ethernet Forum) 8.0 standards. Zarlink's CESoP technology meets all issued and drafted TDM-over-packet and pseudo wire standards.

"Combining our GPON technology with Zarlink's CESoP expertise simplifies the integration and time-to-market of legacy equipment and services with fiber access networks," said Doron Tal, director of product marketing, BroadLight. "Using CESoP to transport TDM traffic significantly reduces the design costs and complexity of OLT and

ONT systems, allowing carriers to rapidly deploy GPON networks supporting the complete range of telecommunication services.”

For more on Zarlink’s CESoP technology visit <http://cesop.zarlink.com/>. A whitepaper on CESoP and GPON technologies co-authored by Zarlink and BroadLight is also available at <http://news.zarlink.com/assets/CESoP-GPON-Whitepaper-Aug06.pdf>.

About Zarlink Semiconductor

For over 30 years, Zarlink Semiconductor has delivered semiconductor solutions that drive the capabilities of voice, enterprise, broadband and wireless communications. The Company’s success is built on its technology strengths including voice and data networks, optoelectronics and ultra low-power communications. For more information, visit www.zarlink.com.

About BroadLight

BroadLight delivers the industry’s only end-to-end solution (from the customer premises to the central office) for equipment vendors designing ITU-T compliant passive optical network (PON) systems. The company’s completely integrated product line consists of standards-based communication semiconductors and software solutions that enable its customers to deliver BPON and GPON equipment to carriers and service providers worldwide. This end-to-end solution provides customers with a lower risk development cycle and enables them to significantly speed time-to-market. As a result, BroadLight technology has been adopted by leading manufacturers who are currently providing equipment for some of the world’s largest fiber PON roll-outs.

Shareholders and other individuals wishing to receive, free of charge, copies of the reports filed with the U.S. Securities and Exchange Commission and Regulatory Authorities, should visit the Company’s web site at www.zarlink.com or contact Investor Relations.

Certain statements in this press release constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. Such risks, uncertainties and assumptions include, among others, the following: rapid technological developments and changes; our ability to continue to operate profitably and generate positive cash flows in the future; our dependence on our foundry suppliers and third-party subcontractors; increasing price and product competition; our exposure to product warranty claims resulting from

product defects or failures; and other factors referenced in our Annual Report on Form 20-F. Investors are encouraged to consider the risks detailed in this filing.

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